

## FAILURE MODES AND EFFECTS ANALYSIS

REFERENCE DESIGNATOR: ODSL  
 NAME/QUANTITY: QUICK RELEASE PIN (1)  
 DRAWING REFERENCE: SED0412724-301

PROJECT: LRU NAME/QUANTITY: ODS CONTINGENCY HARDWARE  
 LRU PART NUMBER: ODS CLAMP ASY (1)  
 SED0412724S

SUBSYSTEM EFFECTIVITY: EVA Tools  
 ALL ORBITS HS

FAILURE MODE NUMBER ODSL-1	Criticality 1R/3	Failure Effect	Failure Detection Method
<u>FUNCTION</u>  The ODS Clamp will be used to hold the two halves of the Space Shuttle docking module attached to the Mir when the bolts holding their flanges are being removed by EVA crewmembers.		<u>END ITEM</u>  Loss of positive lock of Clamp in closed position.  Inadvertent release of Clamp if bumped.	<u>FLIGHT</u>  Visual
<u>FAILURE MODE AND CAUSE</u>  <u>MODE</u>  Inability to lock the ODS Clamp jaws in the closed position.  <u>CAUSE(S)</u>  Jamming or contamination of pin pins.		<u>MISSION</u>  None	<u>GROUND</u>  Pre-Installation Acceptance Test and/or CET  <u>CORRECTIVE ACTION</u>  None
<u>REDUNDANCY SCREEN</u>  A - Pass B - Pass C - Pass	<u>REMAINING PATHS</u>  None	<u>CREW / VEHICLE</u>  None.	<u>REMARKS</u>  Crew training to avoid bumping or kicking lever (operating handle)
<u>MISSION PHASE</u>	<u>CORRECTIVE ACTION TIMES</u>		
	<u>TIME TO EFFECT</u>	<u>TIME TO CORRECT</u>	
EVA	N/A	N/A	